

SEQUENCE LISTING

<110> Macina, Roberto
 Recipon, Herve
 Pluta, Jason
 Ghosh, Malavika
 Sun, Yongming
 Liu, Chenghua

<120> Compositions and Methods Relating to Colon Specific Genes and Proteins

<130> DEX-0289

<150> 60/252,505

<151> 2000-11-22

<160> 124

<170> PatentIn version 3.1

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<213> Homo sapien

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<223> a, c, g or t
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<210> 35
<211> 597
<212> DNA
<213> Homo sapien

<400> 35
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ggtttccaac tggcctaata cattaagtaa gactggctga taacatgacc agacagacat 420
aaagaccctg ttgggaatga cattgaactc tcaaagtcaa gatttcttac acaaattctat 480
cagctggaga aaatgaaggc agtgtggtat atgtgtgcca ataaggacat tatgaagctt 540
aaatatggaa tgtctcttgg acccccgatg tcatctgtat tctctttttc ttcttgt 597

<210> 36
<211> 1327
<212> DNA
<213> Homo sapien

<400> 36
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caaacattta ttgtatttat actattctat atgtactttt ccaggaacca ggaatacaaa 180
actgacatgt tctctgtaca gaggtcaga ctagtagaga acagttaggt acgccgttaa 240
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aacatggtca atggcttctg gatactcaca gttcaggcac agtttctcct gaagattttt 480
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<210>	37
<211>	172
<212>	DNA
<213>	Homo sapien

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<210> 38
<211> 1547
<212> DNA
<213> Homo sapien
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<400>	38						
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ttttagggaaa	tagacaaaacc	attatttggg	tacaactaaa	ggcaactggc	atggactcaa	300	
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 tgatacttgg gtctgataat ggtataagga gaataaagta tttagggatc caatattacg 480
 cctgcagctt tttccaaata gttcatgggg gagggggatg atggaatata gtgaaagata 540
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<210> 39

<211> 360

<212> DNA

<213> Homo sapien

<400> 39

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 tgagttctcc tggacatgaa tctgcagcca cagagcctag aagctcatte ctccacatte 180
 tgtgactgtt ccccaaacac agggagaatt tgcagaaaat aagcccaaaa atcttgccat 240
 tctttgcaat aaaaccccac attacaaact gctgaaaaca ggatttttagc ctgaataggt 300
 tgttcctcta tttgaaagcc ttacaattt cggaggggaag tttccaaatc atcagtaagt 360

<210> 40
 <211> 754
 <212> DNA
 <213> Homo sapien

<400> 40
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 actctagga aatctttcca gacgctagac ccgagttaaa gattagatgt tgattgaatg 180
 aaacactcct gcttgtaggt gcaatcccac atggagctta agatatatat aagcactaga 240
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 aacattttta attttccatt tcaaagcatt ctggtggcct tcttacctg tttttctctg 480
 cctatcctgg gacctgagtt ctctggaca tgaatctgca gccacagagc ctagaagctc 540
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 aaaaatcttg ccattctttg caataaaacc ccacattaca aactgctgaa aacaggattt 660
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<210> 41
 <211> 635
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (560)..(579)
 <223> a, c, g or t

<400> 41
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 aagaaaacac cttgtgtgct attagtggcc cttgcaagaa ggaagatgct gttttccata 180
 acaggaaatc aacgaacgaa caaagataat ccgtctctcc atcttacaaa aacaaagaaa 240
 gcctagcaga aaagtgaaac aggacagggt cctgaaaaac atctagtgat gccaaataaca 300
 tggaatgttt tttaaaaagt gatttgtctc actgaagctg cagaagggtta tcccacactt 360

atatattatg tgactgcact aaaaacagac gcttttggtg cactgagcgt tacaaaaagg 420
 cagaaagctc acaaatagat gcaattttag gtatgggaat aaaatgacat aaagaaactg 480
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 gggcgacta gtggatcgag tcgggacaag ttggg 635

<210> 42
 <211> 1142
 <212> DNA
 <213> Homo sapien

<400> 42
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 ttggatgtag cagctccaaa tagaggttac ctgattattg cttttataat tgaattctta 180
 aagagtttac atcataatta tataattgta tttttgaaac atcacagaaa cccaacatgt 240
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 catcgagccc aacatacaat tatcatttgc attttctgct acaatcaaag aaaacacatt 360
 gtgtgctatt agtggccatt gcaagaagga agatgctggt ttcaataaca ggaaatcaag 420
 aacaaacaaa ataatcgtct tccattttaa aaaaaagaa agcctacaga aaagtgaaaa 480
 ggacagggtc ctaaaaacat ctagtgatgc caataaaatg gaatgttttt taaaaagtga 540
 tttgtctcac tgaagctgca gaagggtatc ccacacttat atattatgtg actgcactaa 600
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 acagacaagt atatatagtt acagctgtac atggatatca caaccttaca cacaaattct 900
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 tt 1142

<210> 43

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<210> 45
 <211> 573
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (310)..(498)
 <223> a, c, g or t

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 cattaatata agataccctg aatttggtta ttatattggt ggtaagagaa taatcttctt 240
 agggaaacata agctgaagta tctgaagtta aatggatatg gtatttccta tctactcttt 300
 tttttttttt nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
 nnnnnnnnnn nnnnnnnnct ggtcaggggt gctaaaatat atgtcggatg ataaggcatt 540
 ttgcccaattg tcacaaacat gattcgggta caa 573

<210> 46
 <211> 537
 <212> DNA
 <213> Homo sapien

<400> 46
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 caggctctc atctacaaag ttccagtagc agtgacgcct acacggaaga cttggaactg 480
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<210> 47
 <211> 797
 <212> DNA
 <213> Homo sapien

<400> 47
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accagaagtt cgatTTTTgt tctgggggtg aaggaggaaa cagactgtac taaaggacta 720
aaataatttg tctatactaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaattcccc 780
cggccgaaag ggaattc 797

<210> 48
<211> 791
<212> DNA
<213> Homo sapien

<400> 48
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<210> 49

<211> 1791
 <212> DNA
 <213> Homo sapien

<400> 49
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<210> 50
 <211> 526
 <212> DNA
 <213> Homo sapien

<400> 50
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 ctgtcatagt tagcttcttt aagattgtac tgtggctgag gtcaaacaca aatgcttctg 360
 ggtaaccag cggtcttcaa tgtatggttg ttgaccaggc gaacccttta gaagtgattt 420
 ctagttttaa caagttttgt accttgccct gggcagggcg ctctgaagcc gaattccatc 480
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<210> 51
 <211> 692
 <212> DNA
 <213> Homo sapien

<400> 51
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 tgaccaacgc atggaagagc aacttgtagg ctctagcctt ttaacaatac ctacataaag 180
 aatattttga tctaaaatgt aacttgggtt ctctgccaca ctggtaataa gtcacaacca 240
 agacatctga atgtgatgga gtataagcaa attttgcggtt tatttttaggc tgccctcttt 300
 cttttctaag agaaagagtt tgcagttctt caaagtggtc ttggatgaaa cctactgttt 360
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 tttatctggt ctacattctc taaactatta ttatatgcct agaaaataag gcattagtaa 480
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 aacattccgg gaaggcgagg gtatttttaa cggctcttat ggtttacagg taacatttga 600
 gtccctaata atttcatatt aaaggggttt cccaaggggt tttatacaaa ataatttggg 660

agaacacggg ggagcgccga agagcggggt tc

692

<210> 52

<211> 3979

<212> DNA

<213> Homo sapien

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 cacagtggca cttctatgat tcaaatacat ttgataccct ttgaaatcaa tcagaatact 660
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 <211> 2965
 <212> DNA
 <213> Homo sapien

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<210> 67
<211> 303
<212> DNA
<213> Homo sapien
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<210> 68
<211> 405
<212> DNA
<213> Homo sapien
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 ctcttttgat ttcagtactg ccaaaaacaag taagccccc gagttaatta caaaaatgta 1200

Geographical location		Study period		Study design		Study population		Study outcome	
Country	Region	Start	End	Design	Sample size	Age range	Gender	Outcome	
USA	California	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Florida	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Illinois	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Michigan	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Minnesota	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	North Carolina	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Ohio	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Pennsylvania	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Texas	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Virginia	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Washington	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Wisconsin	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Yukon-Charley	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Alaska	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Arizona	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Colorado	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Connecticut	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Delaware	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	District of Columbia	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Hawaii	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Idaho	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Iowa	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Kansas	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Kentucky	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Louisiana	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Maine	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Massachusetts	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Montana	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Nebraska	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Nevada	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	New Hampshire	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	New Jersey	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	New Mexico	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	New York	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	North Dakota	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Oregon	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Rhode Island	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	South Carolina	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	South Dakota	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Tennessee	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Utah	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Vermont	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	West Virginia	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Wyoming	1990	1995	Cohort	10,000	18-65	Male	10%	
USA	Alaska	1990	1995	Cohort	10,000	18-65	Male	10%	

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<210> 70
<211> 299
<212> DNA
<213> Homo sapien
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<213>	Homo sapien

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<212> DNA
<213> Homo sapien
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<210> 75
<211> 27
<212> PRT
<213> Homo sapien

<400> 75

Met His Thr Asn Leu Ser Tyr Met Cys Pro Phe Leu Leu Met Ile Phe
1 5 10 15

Thr Ser Leu Arg Thr Leu Thr Asn Ile Val Cys
20 25

<210> 76
<211> 29
<212> PRT
<213> Homo sapien

<400> 76

Met Ile Lys Asn Asp Phe Gly Trp Leu Pro Phe Pro Ser Phe Pro Arg
1 5 10 15

Val Leu Ile Tyr Val Leu His Thr Cys Lys Leu Lys Cys
20 25

<210> 77
<211> 38
<212> PRT
<213> Homo sapien

<400> 77

Met Ser Leu Ile Lys Lys Ile Ser Thr Thr Gly Leu Phe Cys Leu Gly
1 5 10 15

Phe Trp Lys His Asn Phe Pro Met His Lys Lys Ala Leu Ser Lys Leu
20 25 30

Leu Ser Tyr Gly Tyr Asn
35

<210> 78

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<211> 170
 <212> PRT
 <213> Homo sapien

<400> 78

Ala Leu Glu Thr Ala Pro Thr Leu Ala Leu Pro Asp Ser Ser Gln Pro
 1 5 10 15

Phe Ser Leu His Thr Ala Glu Val Gln Gly Cys Ala Val Gly Ile Leu
 20 25 30

Thr Gln Gly Pro Gly Ser Arg Pro Val Ala Phe Leu Ser Lys His Leu
 35 40 45

Asp Leu Thr Val Leu Gly Trp Ser Ser Cys Leu Arg Ala Ala Ala Ser
 50 55 60

Ala Ala Leu Ile Leu Leu Glu Ala Leu Lys Ile Thr Asn Tyr Ala Gln
 65 70 75 80

Leu Thr Leu Tyr Ser Ser His Asn Phe Gln Asn Leu Phe Ser Ser Ser
 85 90 95

His Leu Met His Val Leu Ser Ala Pro Trp Leu Leu Gln Leu Tyr Ser
 100 105 110

Leu Phe Val Glu Ser Pro Thr Ile Thr Ile Ile Pro Gly Arg Asp Phe
 115 120 125

Asn Pro Ala Ser His Ile Ile Pro Asp Thr Thr Pro Asp Pro His Asp
 130 135 140

Cys Ile Ser Leu Ile His Leu Thr Phe Thr Pro Phe Pro His Ile Ser
 145 150 155 160

Phe Phe Pro Val Pro His Pro Asp His Thr
 165 170

<210> 79
 <211> 74
 <212> PRT
 <213> Homo sapien

<400> 79

Met Glu Ser Cys Ser His Arg Cys Leu Asp Leu Ser Leu Ser Leu Ser
 1 5 10 15

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Table 1. Demographic characteristics of the study population	
Age (years)	50.0 ± 10.0
Gender	
Male	50.0%
Female	50.0%
Education (years)	12.0 ± 2.0
Marital status	
Married	80.0%
Single	20.0%
Occupation	
Professional	30.0%
Managerial	20.0%
Technical	10.0%
Skilled	20.0%
Unskilled	20.0%
Income (USD/month)	1,000.0 ± 500.0
Health status	
Good	70.0%
Fair	20.0%
Poor	10.0%

110

Ser Phe Leu Ser Gln Ala Trp Lys Glu Leu Leu Tyr Tyr Gln Tyr Cys
35 40 45

<210> 87
 <211> 40
 <212> PRT
 <213> Homo sapien

<400> 87

Met Leu Phe Pro Val Ala Val Tyr Ser Tyr Asn Ile Asn Ile Ile Val
 1 5 10 15

Pro Trp Leu Thr Asp Lys Asn Glu Ser Ile Lys Cys Pro Val Ser Glu
 20 25 30

Thr Gln Val Phe Phe Leu His Pro
 35 40

<210> 88
 <211> 34
 <212> PRT
 <213> Homo sapien

<400> 88

Met Ser Trp Ser Leu Pro Ser Leu Lys Asn Leu Ser Cys His Ile Ile
 1 5 10 15

His Val Leu Asn Lys Phe Val Cys Ile Phe Leu Leu Ile Cys Leu Ile
 20 25 30

Ser Ile

<210> 89
 <211> 32
 <212> PRT
 <213> Homo sapien

<400> 89

Met Cys Val Cys Glu Lys Glu Phe Leu Asn Val Phe Tyr Leu Leu Arg
 1 5 10 15

Gly Pro Ser Pro Thr Leu Gly Leu Ser Val Ile Ser Asn His Ile Thr
 20 25 30

<210> 90
 <211> 28
 <212> PRT
 <213> Homo sapien

CCPDB

<400> 90

Met Lys Pro Gln Cys Cys Lys Phe Thr Val Phe Ala Cys Ser Arg Cys
 1 5 10 15

Phe Val Leu Lys Glu Thr Phe Thr Ile Tyr Leu Leu
 20 25

<210> 91

<211> 111

<212> PRT

<213> Homo sapien

<400> 91

Lys Asp Arg Lys Ser Gly Arg Thr Ala Leu His Leu Ala Ala Glu Glu
 1 5 10 15

Ala Asn Leu Glu Leu Ile Arg Leu Phe Leu Glu Arg Pro Ser Cys Leu
 20 25 30

Ser Phe Val Asn Ala Lys Ala Tyr Asn Gly Asn Thr Ala Leu His Val
 35 40 45

Ala Ala Ser Leu Gln Tyr Arg Leu Thr Gln Leu Asp Ala Val Arg Leu
 50 55 60

Leu Met Arg Lys Gly Ala Asp Pro Ser Thr Arg Asn Leu Glu Asn Glu
 65 70 75 80

Gln Pro Val His Leu Val Pro Asp Gly Pro Val Gly Glu Gln Ile Arg
 85 90 95

Arg Ile Leu Lys Gly Lys Ser Ile Gln Gln Arg Ala Pro Pro Tyr
 100 105 110

<210> 92

<211> 33

<212> PRT

<213> Homo sapien

<400> 92

Met Gly Ile Ser Trp Ser Ala Phe Gly Pro Arg Ile Arg Ile Asp Gly
 1 5 10 15

Ser Pro Pro Pro Cys Leu Leu Pro Thr Pro Pro Leu Leu Pro Leu Cys
 20 25 30

<400> 95

Ile Glu Asn Ile Leu Pro Ser Ile Glu Leu His Met Leu Leu Leu Ser
20 25 30

<210>	96
<211>	51
<212>	PRT
<213>	Homo sapien

<400> 96

Leu Thr Ser Leu Ile Ala Gln Gln Thr Ser Phe Gln Lys Phe Ser Val
20 25 30

Ala Thr Phe
50

<210>	97
<211>	77
<212>	PRT
<213>	Homo sapien

<400> 97

Glu Cys Ser Gly Thr Ile Ser Ala His Cys Asp Leu His Leu Leu Gly
20 25 30

Ser Ser Asp Ser Pro Ala Ser Thr Ser Arg Val Val Gly Thr Thr Gly

45

Cys Lys Phe Ser Leu Cys Leu Gly Asn Ser His Arg Met Trp Arg Asn
20 25 30


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1              5              10              15

His Pro Gln Gly Leu Gln Ala Val Ser Asn Gly Glu Ser Ala Leu Lys
              20              25              30

Gly Thr Arg Pro Thr Phe Ser Ser Pro Phe Ile Leu
              35              40

<210> 104
<211> 48
<212> PRT
<213> Homo sapien

<400> 104

Met Arg Ser Ile Phe Leu Leu Leu Lys Phe Ile Leu Asn Ala Asn Val
1              5              10              15

Phe Cys Arg Cys Phe Ile Trp Glu Ile Leu Leu Cys Leu Lys Thr Tyr
              20              25              30

Glu Ile Asn Leu Ser Cys Gly Leu Pro Thr Ser Lys Pro Leu Leu Thr
              35              40              45

<210> 105
<211> 109
<212> PRT
<213> Homo sapien

<400> 105

Phe Phe Phe Ser Leu Arg Gln Ser Leu Leu Leu Leu Pro Arg Leu Glu
1              5              10              15

Phe Asn Gly Thr Ile Leu Ala Tyr His Asn Leu Cys Leu Leu Gly Ser
              20              25              30

Ser Asn Ser Pro Ala Ser Gly Ser Gln Val Ala Gly Ile Thr Gly Met
              35              40              45

Cys His His Thr Arg Leu Ile Phe Val Phe Leu Val Glu Thr Gly Tyr
              50              55              60

Leu His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro
65              70              75              80

Pro Thr Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser Arg His
              85              90              95

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Ala Trp Pro Ser Ser Ala Phe Ile His Ile Phe Ser Pro
100 105

<210> 106
<211> 46
<212> PRT
<213> Homo sapien

<400> 106

Met Val Val Asp Gln Ala Asn Pro Leu Glu Val Ile Ser Ser Phe Asn
1 5 10 15

Lys Phe Cys Thr Leu Pro Trp Ala Gly Arg Ser Glu Ala Glu Phe His
20 25 30

His Thr Ala Ala Ile Val Trp Ser Asp Ser Val Gln Leu Gly
35 40 45

<210> 107
<211> 24
<212> PRT
<213> Homo sapien

<400> 107

Met Arg Trp Ser Gly Gly Pro Glu Asn Thr Gly Asn Ile Lys Ser Leu
1 5 10 15

Ser Gln Gly Asn Leu Met Phe Ser
20

<210> 108
<211> 697
<212> PRT
<213> Homo sapien

<400> 108

Met Cys Lys Ser Leu Arg Tyr Cys Phe Ser His Cys Leu Tyr Leu Ala
1 5 10 15

Met Thr Arg Leu Glu Glu Val Asn Arg Glu Val Asn Met His Ser Ser
20 25 30

Val Arg Tyr Leu Gly Tyr Leu Ala Arg Ile Asn Leu Leu Val Ala Ile
35 40 45

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Cys 50	Leu	Gly	Leu	Tyr	Val	Arg 55	Trp	Glu	Lys	Thr	Ala 60	Asn	Ser	Leu	Ile
Leu 65	Val	Ile	Phe	Ile	Leu	Gly	Leu	Phe	Val	Leu	Gly	Ile	Ala	Ser	Ile 80
Leu	Tyr	Tyr	Tyr	Phe 85	Ser	Met	Glu	Ala	Ala 90	Ser	Leu	Ser	Leu	Ser	Asn
Leu	Trp	Phe	Gly 100	Phe	Leu	Leu	Gly	Leu 105	Leu	Cys	Phe	Leu	Asp 110	Asn	Ser
Ser	Phe	Lys 115	Asn	Asp	Val	Lys	Glu 120	Glu	Ser	Thr	Lys	Tyr 125	Leu	Leu	Leu
Thr	Ser 130	Ile	Val	Leu	Arg	Ile 135	Leu	Cys	Ser	Leu	Val 140	Glu	Arg	Ile	Ser
Gly 145	Tyr	Val	Arg	His	Arg 150	Pro	Thr	Leu	Leu	Thr 155	Thr	Val	Glu	Phe	Leu 160
Glu	Leu	Val	Gly	Phe 165	Ala	Ile	Ala	Ser	Thr 170	Thr	Met	Leu	Val	Glu 175	Lys
Ser	Leu	Ser	Val 180	Ile	Leu	Leu	Val	Val 185	Ala	Leu	Ala	Met	Leu 190	Ile	Ile
Asp	Leu	Arg	Met 195	Lys	Ser	Phe	Leu 200	Ala	Ile	Pro	Asn 205	Leu	Val	Ile	Phe
Ala	Val 210	Leu	Leu	Phe	Phe	Ser 215	Ser	Leu	Glu	Thr 220	Pro	Lys	Asn	Pro	Ile
Ala 225	Phe	Ala	Cys	Phe	Phe 230	Ile	Cys	Leu	Ile	Thr 235	Asp	Pro	Phe	Leu	Asp 240
Ile	Tyr	Phe	Ser	Gly 245	Leu	Ser	Val	Thr	Glu 250	Arg	Trp	Lys	Pro	Phe 255	Leu
Tyr	Arg	Gly	Arg	Ile 260	Cys	Arg	Arg	Leu 265	Ser	Val	Val	Phe	Ala 270	Gly	Met
Ile	Glu	Leu	Thr	Phe	Phe	Ile	Leu 280	Ser	Ala	Phe	Lys	Leu 285	Arg	Asp	Thr

Ala Leu Ala Gly Gly Asp Thr Leu Arg Leu Asp Thr Leu Ile Glu Trp
515 520 525

Ser Arg Asn Asn Leu Ser Val Lys Lys Gln Leu Ser Lys Pro Ala Leu
20 25 30

Ile Ser Leu Arg
35

<210> 110
<211> 21
<212> PRT
<213> Homo sapien

<400> 110

Met Tyr Val Phe Asn Asp Val Thr Ser Asn Gln Ala Asn Ile Asn Ile
1 5 10 15

Ile Glu Thr Leu Ile
20

<210> 111
<211> 130
<212> PRT
<213> Homo sapien

<400> 111

Met Pro Thr Gly Pro Gln Ser Ala Ser Phe Gly Ile Thr Gly Asp Asp
1 5 10 15

Gly Ser Pro Val Met Ala Lys Pro Pro Ser Ile Pro Pro Phe Leu Ile
20 25 30

Thr His Leu Leu Trp Lys Ile Cys His Leu Gly Phe Asn Trp Ile Arg
35 40 45

Arg Glu Thr Val Gly Thr Gln Glu Gln Asn Gly Ala Arg Arg Tyr Val
50 55 60

Leu Leu Pro Met Gln His Val Lys Lys Cys Pro Thr Cys Pro His Leu
65 70 75 80

Lys Ile Arg Pro Leu Thr Ser Gln Lys Ile Arg Tyr Ser Gly Pro Gly
85 90 95

Ala Val Ala His Ala Cys Asn Arg Asn Thr Ser Gly Gly Arg Gly Gly
100 105 110

Arg Ile Ile Arg Ser Arg Val Arg Asp Gln Pro Gly Lys Asp Gln Pro
115 120 125

110111130PRTHomo sapien111

Gly Lys
130

<210> 112
<211> 31
<212> PRT
<213> Homo sapien

<400> 112

Met Leu Val Met Val Phe Phe Phe Phe Phe Phe Phe Leu Val Ile Leu
1 5 10 15

Met Leu Trp Lys Arg Ser His Gly Phe Ile Ser Lys Gly Gly Asn
20 25 30

<210> 113
<211> 107
<212> PRT
<213> Homo sapien

<400> 113

Pro Leu Pro Pro Leu Leu Ser Ile Phe Ile Leu Thr Gly His Lys Gln
1 5 10 15

Gly Ala Arg Gly Leu His Phe Gly Arg Pro Arg Trp Ala Asp His Leu
20 25 30

Arg Pro Gly Val Ala His Gln Pro Gly Gln Cys Gly Glu Thr Val Ser
35 40 45

Thr Lys Asn Thr Lys Ile Ser Trp Ala Trp Trp Cys Thr Pro Ala Ile
50 55 60

Pro Ala Thr Arg Arg Val Lys Gln Glu Asn Arg Leu Asn Pro Gly Gly
65 70 75 80

Arg Gly Phe Ser Glu Pro Arg Ser His His Arg Thr Pro Thr Trp Gly
85 90 95

Thr Glu Arg Asp Ser Val Pro Lys Arg Ala Lys
100 105

<210> 114
<211> 58
<212> PRT
<213> Homo sapien

112 113 107 114 58

<212> PRT

<213> Homo sapien

<400> 117

Met	Trp	Lys	Leu	Phe	Tyr	Leu	Ala	Ser	Glu	Glu	Ser	Val	Ala	Asn	Leu
1				5					10					15	

Leu	His	Arg	Leu	Glu	Asp	Ser	Leu	Val	Val	Phe	Phe	Pro	Ser	Val	Ile
			20					25					30		

Asp	His	Ser	Ile	Arg	Asn	Pro	Tyr	Ile	Phe	Arg	Pro	His
		35					40					45

<210> 118

<211> 60

<212> PRT

<213> Homo sapien

<400> 118

Gln	Pro	Gly	Val	Lys	Ile	Arg	Ala	Ala	Leu	Lys	Glu	Thr	Lys	Thr	Gln
1				5					10					15	

Lys	Pro	Leu	Gln	Lys	Ile	Ser	Glu	Phe	Arg	Ser	Trp	Phe	Phe	Glu	Lys
			20					25					30		

Ile	Asn	Lys	Ile	Asp	Arg	Pro	Pro	Ala	Arg	Leu	Ile	Lys	Lys	Lys	Arg
		35					40					45			

Glu	Lys	Asn	Gln	Lys	Glu	Lys	Lys	Lys	Lys	Lys	Lys	Lys
	50					55						60

<210> 119

<211> 32

<212> PRT

<213> Homo sapien

<400> 119

Met	Cys	Pro	Ala	Cys	Ser	Arg	Leu	Pro	Thr	His	Asp	Leu	Leu	Ala	Trp
1				5					10					15	

Pro	Pro	Lys	Val	Leu	Gly	Phe	Thr	Gly	Val	Thr	Thr	Ala	Pro	Gly	Gln
			20					25					30		

<210> 120

<211> 41

<212> PRT

<213> Homo sapien

118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400

<400> 120

Met Pro Tyr Cys Ile Leu His Thr Ala Leu Phe Ser Arg Gly Ser Gly
 1 5 10 15

Ser Lys Leu His Ser Ser His Tyr Leu Cys Ser Leu Lys Ile Lys Val
 20 25 30

Phe Gln Gln His Ser Leu Leu Ser Ser
 35 40

<210> 121

<211> 105

<212> PRT

<213> Homo sapien

<400> 121

Met Gln Gly Lys Cys Thr Pro Thr Ile Phe Phe Phe Ile Ala Ser Phe
 1 5 10 15

Ile Phe Asp Thr Glu Ser Ser Ser Val Ala Gln Ala Gly Val Gln Trp
 20 25 30

Arg Asp Leu Gly Ser Leu Gln Pro Leu Pro Pro Gly Phe Thr Pro Phe
 35 40 45

Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Arg Pro Pro Pro
 50 55 60

Arg Pro Ala Asn Phe Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Pro
 65 70 75 80

Cys Ala Pro Gly Trp Ser Arg Ser Pro Asn Leu Met Ile Arg Pro Pro
 85 90 95

Arg Pro Pro Lys Val Leu Gly Leu Gln
 100 105

<210> 122

<211> 38

<212> PRT

<213> Homo sapien

<400> 122

Met Gly Gln Arg Glu Leu Phe Phe Tyr Ile Ala His Cys Ser Leu Thr
 1 5 10 15

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Gly Ile Asn Ser Arg Gly Leu Ser Phe Asp Val Ser Leu Glu Val Ser
115 120 125

Gln Gly Pro Gly Leu Leu Asn Asp Thr Lys Val Tyr Thr Val Asp Leu
 130 135 140

Gly Arg Thr Val Thr Ile Asn Cys Pro Phe Lys Thr Glu Asn Ala Gln
 145 150 155 160

Lys Arg Lys Ser Leu Tyr Lys Gln Ile Gly Leu Tyr Pro Val Leu Val
 165 170 175

Ile Asp Ser Ser Gly Tyr Val Asn Pro Asn Tyr Thr Gly Arg Ile Arg
 180 185 190

Leu Asp Ile Gln Gly Thr Gly Gln Leu Leu Phe Ser Val Val Ile Asn
 195 200 205

Gln Leu Arg Leu Ser Asp Ala Gly Gln Tyr Leu Cys Gln Ala Gly Asp
 210 215 220

Asp Ser Asn Ser Asn Lys Lys Asn Ala Asp Leu Gln Val Leu Lys Pro
 225 230 235 240

Glu Pro Glu Leu Val Tyr Glu Asp Leu Arg Gly Ser Val Thr Phe His
 245 250 255

Cys Ala Leu Gly Pro Glu Val Ala Asn Val Ala Lys Phe Leu Cys Arg
 260 265 270

Gln Ser Ser Gly Glu Asn Cys Asp Val Val Val Asn Thr Leu Gly Lys
 275 280 285

Arg Ala Pro Ala Phe Glu Gly Arg Ile Leu Leu Asn Pro Gln Asp Lys
 290 295 300

Asp Gly Ser Phe Ser Val Val Ile Thr Gly Leu Arg Lys Glu Asp Ala
 305 310 315 320

Gly Arg Tyr Leu Cys Gly Ala His Ser Asp Gly Gln Leu Gln Glu Gly
 325 330 335

Ser Pro Ile Gln Ala Trp Gln Leu Phe Val Asn Glu Glu Ser Thr Ile
 340 345 350

Pro Arg Ser Pro Thr Val Val Lys Gly Val Ala Gly Ser Ser Val Ala
 355 360 365

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Val Leu Cys Pro Tyr Asn Arg Lys Glu Ser Lys Ser Ile Lys Tyr Trp
 370 375 380

Cys Leu Trp Glu Gly Ala Gln Asn Gly Arg Cys Pro Leu Leu Val Asp
 385 390 395 400

Ser Glu Gly Trp Val Lys Ala Gln Tyr Glu Gly Arg Leu Ser Leu Leu
 405 410 415

Glu Glu Pro Gly Asn Gly Thr Phe Thr Val Ile Leu Asn Gln Leu Thr
 420 425 430

Ser Arg Asp Ala Gly Phe Tyr Trp Cys Leu Thr Asn Gly Asp Thr Leu
 435 440 445

Trp Arg Thr Thr Val Glu Ile Lys Ile Ile Glu Gly Glu Pro Asn Leu
 450 455 460

Lys Val Pro Gly Asn Val Thr Ala Val Leu Gly Glu Thr Leu Lys Val
 465 470 475 480

Pro Cys His Phe Pro Cys Lys Phe Ser Ser Tyr Glu Lys Tyr Trp Cys
 485 490 495

Lys Trp Asn Asn Thr Gly Cys Gln Ala Leu Pro Ser Gln Asp Glu Gly
 500 505 510

Pro Ser Lys Ala Phe Val Asn Cys Asp Glu Asn Ser Arg Leu Val Ser
 515 520 525

Leu Thr Leu Asn Leu Val Thr Arg Ala Asp Glu Gly Trp Tyr Trp Cys
 530 535 540

Gly Val Lys Gln Gly His Phe Tyr Gly Glu Thr Ala Ala Val Tyr Val
 545 550 555 560

Ala Val Glu Glu Arg Lys Ala Ala Gly Ser Arg Asp Val Ser Leu Ala
 565 570 575

Lys Ala Asp Ala Ala Pro Asp Glu Lys Val Leu Asp Ser Gly Phe Arg
 580 585 590

Glu Ile Glu Asn Lys Ala Ile Gln Asp Pro Arg Leu Phe Ala Glu Glu

595

600

605

Lys Ala Val Ala Asp Thr Arg Asp Gln Ala Asp Gly Ser Arg Ala Ser
 610 615 620

Val Asp Ser Gly Ser Ser Glu Glu Gln Gly Gly Ser Ser Arg Ala Leu
 625 630 635 640

Val Ser Thr Leu Val Pro Leu Gly Leu Val Leu Ala Val Gly Ala Val
 645 650 655

Ala Val Gly Val Ala Arg Ala Arg His Arg Lys Asn Val Asp Arg Val
 660 665 670

Ser Ile Arg Ser Tyr Arg Thr Asp Ile Ser Met Ser Asp Phe Glu Asn
 675 680 685

Ser Arg Glu Phe Gly Ala Asn Asp Asn Met Gly Ala Ser Ser Ile Thr
 690 695 700

Gln Glu Thr Ser Leu Gly Gly Lys Glu Glu Phe Val Ala Thr Thr Glu
 705 710 715 720

Ser Thr Thr Glu Thr Lys Glu Pro Lys Lys Ala Lys Arg Ser Ser Lys
 725 730 735

Glu Glu Ala Glu Met Ala Tyr Lys Asp Phe Leu Leu Gln Ser Ser Thr
 740 745 750

Val Ala Ala Glu Ala Gln Asp Gly Pro Gln Glu Ala
 755 760

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